

MAGNETIC TUNNEL JUNCTION DEVICE WITH DIELECTRIC SPACER

ABSTRACT

A method of making a magnetic tunnel junction device is disclosed. The magnetic tunnel junction device includes a magnetic tunnel junction stack and an electrically non-conductive spacer in contact with a portion of the magnetic tunnel junction stack. The spacer electrically insulates a portion of the magnetic tunnel junction stack from an electrically conductive material used for a via that is in contact with the magnetic tunnel junction stack and a top conductor. The spacer can also prevent an electrical short between a bottom conductor and the top conductor. The spacer can prevent electrical shorts when the magnetic tunnel junction stack and a self-aligned via are not aligned with each other.